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ABSTRACT

Data documenting the growth in expenditures among seven types of higher education institutions between 1975 and 1986 are presented, based on information from 152 institutions in the Higher Education General Information Survey reports. The analysis tracks the expenditure growth in administrative and academic functions across the range of 4-year baccalaureate colleges and universities. Specifically, data are presented for: annual percentage increases in core functions by institutional sector; annual percentage increases in core functions by full-time equivalent enrollment; comparison of annual percentage increases in academic and administrative functions; and annual percentage increases by expenditure category for the private college sector, research university sector, and public comprehensive sector. The data show that expenditure growth rates were highest among the major private research universities and higher-priced private colleges, though even lower-priced private colleges and state colleges and universities experienced significant expenditure growth. Most institutional sectors experienced a greater increase in administrative expenditures than academic expenditures. (JDD)

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EXPENDITURE GROWTH IN HIGHER EDUCATION: 1975-1986

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Profiles

Expenditure Growth in Higher Education: 1975-1986

The following six profiles present data documenting the growth in expenditures among seven types of institutions between 1975 and 1986. This analysis uses the same framework developed for the "Profiles" section accompanying the essay entitled "Double Trouble" in *Policy Perspectives*, September 1989. Using the same sample institutions, the analysis presented below tracks the expenditure growth in administrative and academic functions across the range of four-year baccalaureate colleges and universities. The data are drawn from the U.S. Department of Education's Higher Education General Information Survey (HEGIS) reports of financial statistics for fiscal years 1975 and 1986. To graph the real growth in expenditures, all 1975 dollars have been converted into 1986 dollars using the gross national product implicit price deflator.

Institutions were grouped according to the following classifications:

PR1 Private colleges and non-research universities with annual 1988 undergraduate tuition and fees less than $7,500 (designated as lower-priced colleges).

PR2 Private colleges and non-research universities with annual 1988 undergraduate tuition and fees of between $7,500 and $9,999 (designated as moderately priced colleges).

PR3 Private colleges and non-research universities with annual 1988 undergraduate tuition and fees greater than or equal to $10,000 (designated as higher-priced colleges).

RPRV Private research universities with membership in the Association of American Universities (AAU) (designated as major private research universities).

RPUB Public research universities with membership in the AAU (designated as major public research universities).

LG Land-grant universities and colleges with membership in the National Association of State Universities and Land-Grant Colleges (NASULGC) but not membership in the AAU (designated as land-grant institutions).

SCU State colleges and universities with membership in the American Association of State Colleges and Universities (AASCU) but not membership in NASULGC (designated as state colleges and universities).

The sample of institutions was drawn as follows: all members of the AAU (25 private, 27 public) except for three institutions that comprise multi-campus systems; a random sample of all non-AAU members of NASULGC (n=23); a random sample of all non-NASULGC members of AASCU (n=25); a random sample of grant applicants to the Consortium for the Advancement of Private Higher Education (CAPHE) (n=21); all colleges belonging to the Consortium on Financing Higher Education (COFHE) (n=14); and a random sample of non-AAU, non-COFHE, non-CAPHE members of the Higher Education Data Sharing (HEDS) group (n= 22). Once the sample was drawn, institutions were placed in their respective categories as follows: PR1 (19); PR2 (20); PR3 (30); RPRV (22); RPUB (21); LG (17); SCU (23).

The graphic technique employed to display the data in Figures 1 through 3 presents the median as well as the range of expenditure growth both within and across the institutions represented in the sample. The dominant range for each category of institution is displayed as an outlined box that provides a general indication of data points between the 25th and 75th percentile. Within the box plots for Figures 1 through 3, the top and bottom of the box are approximations of quartile ranges based on the software package *Data Desk* by Paul F. Velleman. Table 1, which appears at the end of this analysis, provides the actual numbers for the median and the 25th and 75th percentiles for each institutional category.

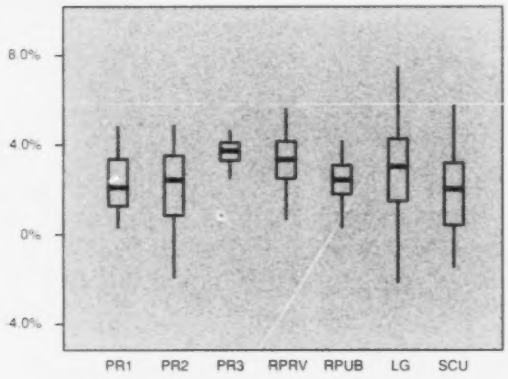
Our analysis of the HEGIS data suggests that the ranges within each category may well reflect variations in data consistency as much as variations in

Data assembled and analyzed by Bridget Doyle, Jan Fernback, William F. Massy, Susan M. Shaman, Daniel B. Shapiro, Glen R. Stine, and Robert Zemsky

institutional experience. While the graphic display presents the range of expenditure growth within each institutional category, we nonetheless focus on the median as the most telling and reliable indicator. The median for each range is indicated by the horizontal bar across the outlined box. Unless otherwise noted in the following discussion, we will refer to the median as being representative of a majority of the institutions in a given category. The extended range is depicted by the "whiskers" that extend above and below the outlined box. The most extreme data points for each of the measures were excluded from analysis.

Fig. 1

Annual Percentage Increase in Core Functions
By Institutional Sector



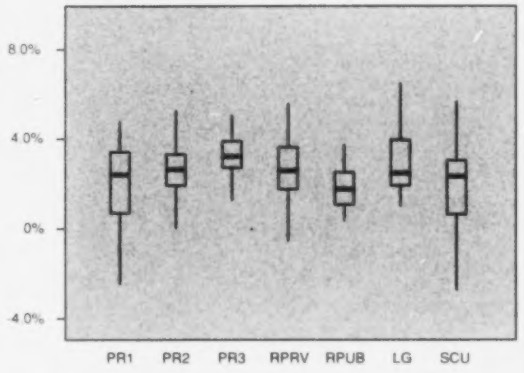
1975 to1986 in constant 1986 dollars.
Source: U.S. Department of Education Higher Education General Information Survey X. Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1975 (HEGIS 1975) and Survey XXI: Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1986 (HEGIS 1986). Core Functions includes Part B lines 1,2,3,4,6,7,8.

Figure 1 represents the annual percentage increase (real growth) in expenditures for core institutional functions, defined as academic functions plus administrative functions. Academic functions include instruction, research, and public service, while administrative functions include academic support (including the library), student services, institutional support, and plant operation and maintenance (excluding capital investment). It is important to note that *all financial aid expenditures have been excluded* from this analysis.

Figure 1 indicates that expenditure growth rates were highest among the major private research universities (RPRV) and higher-priced private colleges (PR3), which grew an average of 3.5 and 3.9 percent per year, respectively. Even the less well-funded, lower-priced private colleges (PR1) and state colleges and universities (SCU) experienced significant growth, increasing expenditures by an average of 2.3 and 2.2 percent per year, respectively.

Fig. 2

Annual Percentage Increase in Core Functions/FTE
By Institutional Sector



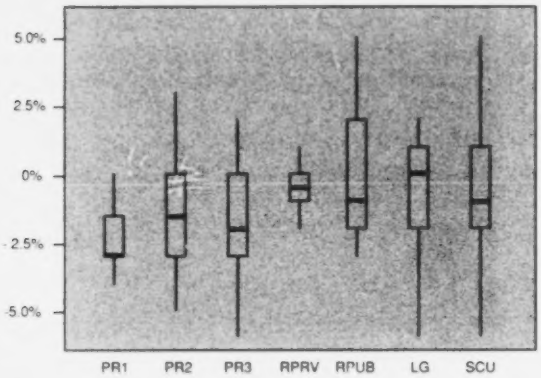
1975 to 1986 in constant 1986 dollars.
Source: HEGIS 1975; HEGIS 1986. Core Functions includes Part B lines 1,2,3,4,6,7,8.

Figure 2 introduces changes in full-time equivalent (FTE) enrollment into the calculation of expenditure growth in order to distinguish expenditure growth in the enterprise itself from growth associated with increased enrollments. The annual percentage increase in core functions per FTE reveals the same general patterns seen in Figure 1 for all institutional sectors. Figure 2 indicates that the expenditure growth in core functions experienced by all institutional sectors is not an enrollment-driven phenomenon.

Figure 3 compares annual percentage increases in academic and administrative functions, subtracting the latter from the former. For each sector, the median growth rates for each function were substantial. That the median points in Figure 3 all fall below zero, however, indicates that all sectors experienced,

Fig. 3

Comparing Annual Percentage Increases
Academic Minus Administrative Functions By Institutional Sector



1975 to1986 in constant 1986 dollars
Source: HEGIS 1975; HEGIS 1986. Academic Functions includes Part B lines 1,2,3. Administrative Functions includes Part B lines 4,6,7,8.

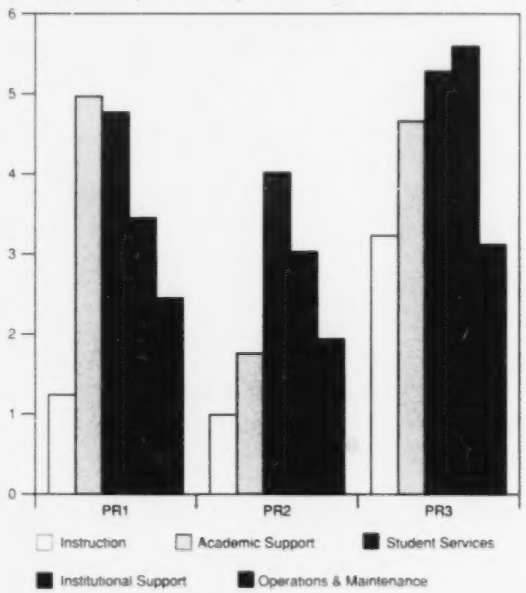
on the average, faster median growth per year in administrative function expenditures than in academic function expenditures. The lower-priced private colleges (PR1) experienced the largest median differential in administrative versus academic functions, with a median of -2.79 percentage points. The moderately priced (PR2) and higher-priced (PR3) private colleges also exhibit large differentials, with medians of -1.58 and -1.64 percentage points, respectively. This pattern is consistent with findings reported in a 1989 study by Timothy Warner and Kathleen Kern, which concluded that small private colleges, when faced with waning government student aid appropriations, were more likely to curtail expenditure growth in their academic budgets than in their budgets supporting student life, admissions, and development.*

While the dominant ranges indicate that as many as 25 percent of the institutions in the public research (RPUB), land-grant (LG), and state colleges and universities (SCU) sectors experienced more expenditure growth in academic functions (or became less consistent in their reporting of financial data), it is clear that most institutional sectors experienced a greater increase in administrative expenditures on the average over the 11-year period.

Figures 4, 5, and 6 display expenditure growth rates for four components of the administrative function: academic support, student services, institutional support, and operation and maintenance. Each graph presents this breakdown for a different group of institutional sectors; Figure 4 presents comparisons for private colleges (types PR1, PR2, and PR3), Figure 5 for research universities (types RPRV and RPUB), and Figure 6 for comprehensive public colleges and universities (LG and SCU). These figures also show for each institutional category the median expenditure growth rate for instruction, which constitutes one component of the academic function. The display of the instruction function

Fig. 4

Annual Percentage Increase by Expenditure Category for the Private College Sector
Median Experience by Sector and Functions



1975 to 1986 in constant 1986 dollars
Source: HEGIS 1975; HEGIS 1986. Instruction includes Part B line 1, Academic Support includes Part B line 4, Student Services includes Part B line 6, Institutional Support includes Part B line 7, Operations & Maintenance includes Part B line 8.

*"Federal Student Aid and the Financing of Colleges and Universities: Some Impacts on Small Private Colleges in the 1980s" (Philadelphia: Pew Higher Education Research Program, 1989).

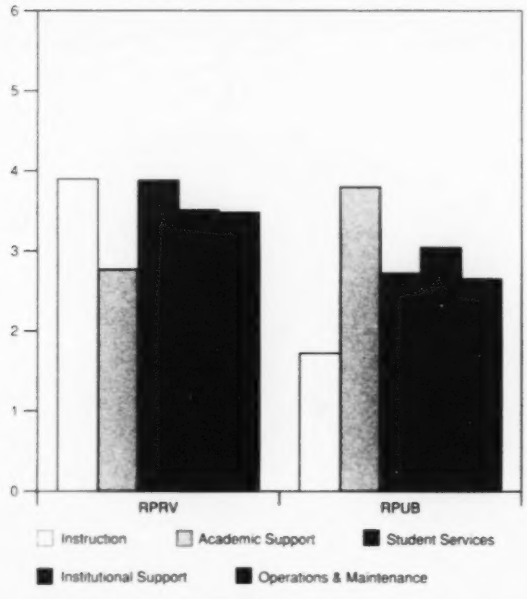
provides a scale of reference for comparison with the four components of the administrative function.

Within all three types of institutions in the private college sector, it is clear that more has been invested in the general administrative functions than in the instruction function (Figure 4). In the private college sector, higher-priced liberal arts colleges (PR3) demonstrate the largest overall expenditure growth, on the average, per function. Annual expenditure growth for all three types of institutions is consistently above 3.0 percent for the student service and institutional support functions, whereas the median investment in the instruction function (all general, non-administrative expenditures involving instruction, public service, and research that are not separately budgeted) is significantly lower, particularly at the lower-priced (PR1) and moderately priced (PR2) private colleges. Among these colleges, the median expenditure growth rates in the instruction function, 1.2 and 1.0 percent per year, respectively, are the lowest growth rates for any expenditure category at all institutional types.

While both private research (RPRV) and public research (RPUB) universities experienced similar overall expenditure growth rates (Figure 1), Figure 5 shows important differences in where this growth occurred. Private research universities (RPRV) invested, on the average, 3.9 percent per year in the instruction function, whereas the public research universities (RPUB) demonstrated a median increase of only 1.7 percent per year in this function. This suggests that private research universities, more than any other category of institution, maintained the ability to invest in instruction at a rate commensurate with the increased expenditures in administrative areas.

Fig. 5

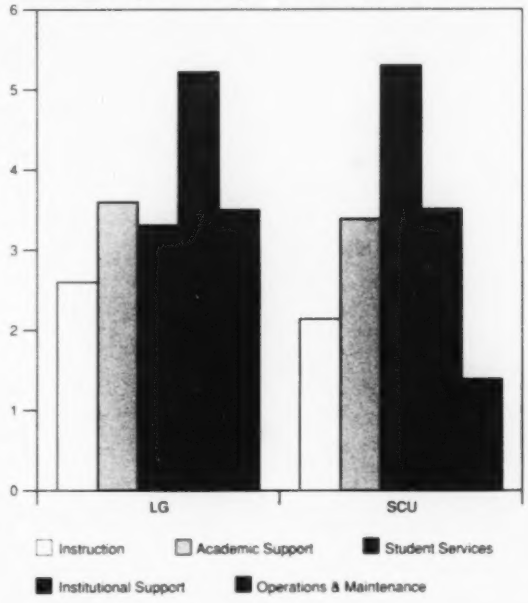
Annual Percentage Increase by Expenditure Category for the Research University Sector
Median Experience by Sector and Functions



1975 to 1986 in constant 1986 dollars.
Source: HEGIS 1975; HEGIS 1986. Instruction includes Part B line 1, Academic Support includes Part B line 4, Student Services includes Part B line 6, Institutional Support includes Part B line 7, Operations & Maintenance includes Part B line 8.

Fig. 6

Annual Percentage Increase by Expenditure Category for the Public Comprehensive Sector
Median Experience by Sector and Functions



1975 to 1986 in constant 1986 dollars.
Source: HEGIS 1975; HEGIS 1986. Instruction includes Part B line 1, Academic Support includes Part B line 4, Student Services includes Part B line 6, Institutional Support includes Part B line 7, Operations & Maintenance includes Part B line 8.

Among land-grant institutions (LG) and state colleges and universities (SCU), expenditures on the instruction function showed median increases of 2.6 and 2.1 percent per year, respectively (Figure 6), but increases in the general administrative function accounted for most of the annual expenditure growth.

It is worth noting that the state colleges and universities (SCU), having traditionally smaller budgets, enjoyed expenditure growth rates nearly equal to their land-grant (LG) counterparts in all four administrative functions.

Table 1
Data for Figures 1 through 3

	PR1	PR2	PR3	RPRV	RPUB	LG	SCU
Figure 1							
25th	1.44	0.98	3.48	2.74	1.93	1.48	0.63
Median	2.30	2.68	3.91	3.53	2.67	3.30	2.25
75th	3.65	3.78	4.41	4.58	3.40	4.58	3.50
Figure 2							
25th	0.02	1.89	2.70	1.74	1.00	1.81	0.60
Median	2.50	2.66	3.24	2.57	1.78	2.48	2.35
75th	3.44	3.60	3.98	3.69	2.67	3.98	3.08
Figure 3							
25th	-3.26	-3.42	-2.83	-1.52	-1.99	-3.16	-2.28
Median	-2.79	-1.58	-1.64	-0.56	-0.77	0.18	-0.92
75th	-1.47	-0.01	-0.27	0.43	1.68	1.16	1.14

Table 2
Data for Figures 4 through 6

	PR1	PR2	PR3	RPRV	RPUB	LG	SCU
Instruction	1.24	0.99	3.23	3.90	1.72	2.60	2.14
Acad Support	4.97	1.76	4.66	2.77	3.80	3.60	3.39
Student Service	4.77	4.02	5.28	3.88	2.72	3.31	5.30
Instit Support	3.45	3.03	5.59	3.51	3.04	5.22	3.51
O & M	2.45	1.94	3.12	3.48	2.65	3.50	1.39

Cases

Colleges and universities of all kinds are confronting the need to reduce their expenditures. Policy Perspectives *interviewed officials from several institutions representing different sectors of higher education to discover the kinds of issues that arise and steps that are being taken to bring expenditures in line with revenues. These are preliminary reports from institutions that have undertaken significant cost-cutting measures.*

Bryn Mawr College: Achieving Financial Equilibrium

Background:

Bryn Mawr is a small liberal arts college that has sought from its beginnings to offer both excellence in liberal arts education and strong scholarly links to the community of research universities. These ambitions have led the institution to offer a wide scope of programs and to maintain a large faculty with respect to the size of its undergraduate student body. In addition, Bryn Mawr returns a relatively high proportion of its tuition revenues to students in the form of financial aid.

By the early 1970s, it became clear that the institution's financial resources were inadequate to support all of its programs. In 1976, Bryn Mawr recorded a deficit that amounted to 10 percent of its budget. At that time, the trustees set in motion a full review of the College's finances.

First Steps:

The 1976 study revealed a number of problems: a high number of programs being offered; a low student/faculty ratio; inadequate compensation for the faculty; a deferral of physical plant maintenance; and a need for new facilities. A plan addressing these findings was developed and approved, and reductions in expenditures were made throughout the College. Nevertheless, the report warned that the plan did not go all the way in assuring the College a sound financial foundation. And this was indeed the case.

In the 1970s and early 1980s, the College was able to balance its budgets, but only by making less progress in salary improvement than had been planned and by endowment spending. In 1986, this spending reached between 8 and 9 percent of the market value of the endowment. Despite a successful centennial campaign, the College's resources remained insufficient to support the full range of institutional needs. The trustees then sought the assistance of Cambridge Associates in studying how the institution might approach its financial planning.

The Cambridge Associates study broadened the scope of Bryn Mawr's definition of financial equilibrium, which had been focused on balanced budgets, to include preservation of the endowment as well as the institution's physical assets, and adequate compensation for faculty and staff. The administration then developed a five-year plan (1987-1992) to bring the College into financial equilibrium through a combination of reductions in expenses and increases in revenues.

The budget reductions made between 1986 and 1990 differed from those made a decade earlier in that they recognized the need to make more focused, rather than general cuts. Of particular significance was the institution's recognition of the need to make reductions in academic programs. The 1987 Plan for Achieving Financial Equilibrium called for reducing the number of graduate programs, the size of the standing faculty, and the amount of financial aid awarded. Reductions were also recommended for academic support services, including staff reductions in the library and grants administration divisions. In non-academic programs, reductions in the number of staff positions were made possible through restructuring business activities and making changes in the range of services offered by several units.

In addition to budget reductions, the 1987 plan recommended seeking revenue increases as a means of achieving financial equilibrium. The most significant change proposed toward this end was an increase in undergraduate enrollment.

Prospects:

The College's financial position is stronger now than it has ever been. Significant progress has been made toward achieving financial equilibrium, including some real improvement in faculty salaries and support for the physical plant. The number of graduate programs offered—which stood at 27 in 1976 and 20 in 1986—has been reduced to 14. Despite the reduction in the number of programs, the total full-time equivalent enrollment at the College has risen due to increases in the number of undergraduates. Nevertheless, the prospect of increasing national competition for declin-

ing numbers of traditional-aged students and the current economy augur difficult times for higher education, making sustainable financial equilibrium a continuing challenge.

Franklin and Marshall College: Eliminating Redundancy

Background:

In 1988, the officers of Franklin and Marshall College recognized that they were facing two serious problems. Expenditures for administrative employees were increasing faster than those for faculty, and funds for program innovation were increasingly difficult to identify, in spite of large increases in tuition. In response to these problems, the College undertook a study of non-curricular expenditure patterns with the following objectives: to reduce operating costs and eliminate redundant operations; to recover use of or find alternatives to the expenditure of capital funds; and to avoid obligations to provide services that are readily available elsewhere.

It was acknowledged that at any college, approximately half the operating expenses are personnel-related, and many of the remaining expenses provide little opportunity for generating savings. Consequently, generating cost reductions would require the College to reduce both the number of employees and the levels at which tasks are performed.

First Steps:

Because the initiatives were directed at areas outside the academic program, the general officers decided they were properly an administrative concern; this considerably expedited decision-making and implementation. As a first step, several functions were reassigned so as to reduce by one the number of vice presidents. In addition to the direct savings generated by eliminating a secretarial position and office expenses, this step offered the advantages of freeing valuable space and improving noticeably the coordination of the affected subordinate functions. Direct savings on personnel costs were also realized by halting efforts to round out descriptions for several positions no longer needed as initially defined and, instead, eliminating the positions.

The College's bookstore operation provided another opportunity to achieve significant savings without substantially altering performance. After investigating several alternatives, the College elected to lease that operation to a for-profit corporation. The College received payment for its inventory in the amount of $1 million and eliminated seven positions from its payroll. This arrangement has proven to be clearly more efficient. The bookstore will soon be housed in a retail facility owned and operated by a for-profit partnership (in which the College has an interest), from which it may compete with other bookstores in the area.

The College's print shop was, for many years, a manager's nightmare. Priorities were difficult to establish, costs for printing were not properly or equitably assessed, and a favored-status hierarchy among departments caused constant conflict. The existence of many excellent printers in the area made it possible to eliminate the print shop, thereby enabling the College to save three positions; to obtain $10,000 in the sale of printing equipment; and to recover space in the central heating/cooling plant, where the shop was located. The availability of this space subsequently generated a reduction of 80 percent in the cost of a chiller-expansion project originally estimated at $1.3 million.

Other savings were realized by taking a hard look at College-owned facilities. A block of rental properties that were only marginally productive financially and no longer served College needs was sold for $644,000. The proceeds were invested, and the sale allowed the elimination of an additional position. The College retained a right of first refusal in subsequent changes in ownership of the properties.

Finally, energy conservation measures permitted reductions of $100,000 in energy costs, in spite of the addition of two new buildings; and changes in the production of the alumni magazine increased the number of issues while decreasing annual costs by $74,000.

Prospects:

In summary, on an operating budget of $39 million, the changes described above produced $650,000 in operating savings; $1,644,000 in recovered capital funds; and $1,000,000 in avoided capital expense. Although there have been minor problems, these actions have had no discernible negative effect on the College's education program.

Because the challenge to find innovative funding continues, Franklin and Marshall's general officers have decided to continue this process, with a target of $800,000 in operating savings. The basic objectives are unchanged, though more sophisticated analyses will be required to find cost-cutting opportunities. In particular, the College intends to combine several redundant operations and to reassign or discontinue several peripheral functions.

New Jersey State Colleges: Strategic Contraction

Background:

During the 1980s, New Jersey's nine state colleges benefited from a period of unprecedented economic growth in the state. Financial commitments to the colleges were expanded in the form of annual state appropriations, special incentive grants, and a facilities bond referendum. In addition, the state colleges were granted a large degree of autonomy from central government regulation. Under these favorable economic and political conditions, the state colleges were able to make significant improvements in academic programs and community service, while also enjoying success in the enrollment and retention of minority students and in faculty affirmative action.

In 1990, New Jersey's newly elected governor, Jim Florio, inherited a $1.5 billion budget deficit on a total state budget of $12 billion. To help balance the budget, cuts were made in the state's appropriations to higher education in fiscal years 1990 and 1991. The higher education budget was trimmed from more than $1 billion to $900 million. For the state colleges, these cuts meant the loss, in one year, of over $25 million in appropriations for instructional services, or 10 percent of the total funding they had received from the state. The state appropriation, which had formerly comprised 61 percent of total college revenue, declined to only 55 percent of total college revenue.

First Steps:

One of the colleges' initial responses to the state's budget cuts was a freeze on hiring that left several hundred positions, both instructional and administrative, unfilled. Facilities improvements and equipment purchases were temporarily deferred. Tuitions were raised at rates varying from 9 to 17 percent; these increases, however, made up for only one-third of the shortfall in state revenue. The presidents and trustees called these measures "strategic contraction" and hoped that they would allow quality, access, and affordability to be preserved.

Steps were also taken on the political front to accord the individual campuses greater autonomy in their financial planning efforts. The New Jersey State Governing Boards Association, a non-profit organization that represents the collective interests of the state colleges, successfully advocated appropriations language that encouraged campus initiative in the management of enrollments, tuition and fees, student financial aid, early faculty retirement, and facilities renovations and construction.

Prospects:

Hopes for restorations in funding for fiscal year 1992 were dashed in July 1990 when the State Office of Management and Budget issued a memorandum requesting the colleges to revise their budget plan downward by another 8 percent. The governor then announced in the fall that state-negotiated salary increases in the state colleges, costing the colleges $12 million for fiscal year 1991, would not be funded by the state, thereby adding greater unpredictability to the colleges' financial planning. The combined effect of these cuts, amounting to a loss of about 25 percent of total state funding before inflation, would return the base budgets of the state colleges to 1987 levels. Cuts of this magnitude are unprecedented nationally in the history of public higher education.

State college leaders have made clear publicly that they will work fiercely to preserve their hard-earned quality without sacrificing diversity or affordability. To do this will require hard decisions about downsizing the overall level of college services. Cutbacks in enrollments, reductions in the numbers of staff and classes offered, the tapping of reserve funds, and the elimination of some programs and community services are among the methods currently being discussed to achieve the necessary budget reductions. The collective bargaining environment in which the state colleges operate adds to the challenge of fiscal planning in a period of budget reduction. Several colleges are engaged in a program-by-program analysis of critical needs as they relate to college mission in order to determine what will be severed and what will be retained.

The budget crisis has forced the colleges to set priorities regarding their distinctive missions, and it has provided the college leaders with the opportunity to make a public case stressing the value of the colleges to the state's long-term human capital and economic opportunity agendas. The substantial cutbacks of the past year have also underscored the critical obligation of the state to provide predictable funding for basic academic infrastructure and services. The colleges are demonstrating that state college autonomy works, both in terms of preserving maximum strategic management flexibility and of providing maximum accountability. When the revenue crisis ends, the colleges hope to emerge as stronger institutions, with broader public support and greater control of their destinies.

Stanford University: Repositioning for the 1990s

Background:

The context for the Stanford experience rests in the decade of the 1980s, which by any set of standard measures was a virtual boom period. For 1980-1988, Stanford recorded average annual compound growth rates—adjusted for inflation (CPI)—of 6.7 percent in the operating budget, 5.6 percent in sponsored research, and 10 percent in gifts. Also, during this period, the Stanford staff grew by 28 percent, while the faculty grew by 5 percent.

As the decade of the 1980s drew to a close, there were growing signs that the boom period could not be sustained. Stanford recorded modest unplanned deficits in 1987 and 1988. Then, in April 1989, the first planned deficit in over 15 years was reluctantly approved by the Board of Trustees for the 1989-90 fiscal year. In light of this deficit, the administration, with the support of the Board, began to seek ways to address Stanford's budget issues.

First Steps:

Stanford's first organized efforts to begin the change process started in the fall of 1989 with the creation of a program called Action Plans for Change. The effort focused on the creation and work of several "action teams." The principal objective of these teams was to recommend ways of creating lasting organizational change in key areas of the institution. These areas were identified through a series of meetings with a broad-based group of Stanford faculty.

The efforts of these teams were significantly affected by two external events that occurred in the fall of 1989, just a few weeks after they had begun their work. The first event was the October 17 earthquake, which resulted in $140 million in damage to the campus. The second was a new set of financial realities that emerged from changes in Stanford's income projections—mainly, reductions in government funding of research—and considerable public pressure to restrain the growth of tuition rates.

To address these realities, Provost James Rosse announced in February 1990 a broad-based program called "Repositioning." Repositioning had four specific objectives: (1) to constrain growth in income sources by holding student fee increases close to inflation and holding constant or reducing indirect cost rates for sponsored research; (2) to reduce the administrative and support components of the operating budget by $22 million; (3) to constrain the building program; and (4) to expand the work of the action teams toward procedural and organizational reform. The repositioning effort sought not just immediate budget reduction but strategies to change the culture of the University in ways that might avoid a reversion to old inefficiencies. The efforts of Repositioning were managed by a steering committee, comprised of senior faculty and administration, a trustee, and an executive of a major local corporation. The committee established budget reduction targets for each unit of the University, ranging from 5 percent in the school administrative areas to 30 percent in human resources.

Prospects:

Progress has been made toward achieving the objectives of the Repositioning effort. First, the University has moved ahead on its pledge to constrain student charges and indirect cost rate growth. Second, plans have been developed and are currently being implemented to achieve the $22 million in administrative cost reductions. Third, some building projects have been deferred to free up funds for earthquake repair and to reduce pressure on the indirect cost rate. Fourth, the action teams have reported some significant recommendations for change. The human resources (HR) action team discovered that Stanford's HR staff/employee ratio was almost double that of comparable organizations, and it suggested that streamlining HR functions could help bring about a 30 percent budget reduction.

The library team recognized the potential for synergy between the library and the University's information resources unit, and it recommended merging the two. The student services team recommended creation of a new vice presidency to improve coordination of a widely dispersed set of functions and reduce the number of direct reports to the President and Provost. The action team on central administrative reporting recommended a reorganization of the senior academic and administrative leadership that relied more heavily on school leadership for policy guidance and connected the schools more directly to the support units, with the school administrative deans providing a direct connection to the suppliers of university services.

Although these are positive initial outcomes, they will be improved upon if long-term changes in the management culture ultimately occur. Some of these changes are underway as individual units now go through the difficult process of implementation—restructuring and, where possible, redesigning work. This implementation phase is planned to conclude at the end of the current fiscal year, August 31, 1991.

The University of Michigan: Enhancing Quality Within Resource Constraints

Background:

In March 1990, the Task Force on Costs in Higher Education at the University of Michigan presented its report to the campus community: "Enhancing Quality in an Era of Resource Constraints." This document provides an inquiry into the nature of costs at the University of Michigan and, by extension, at any major public research university. The purpose of the Task Force, as conceived by President James Duderstadt, was "to analyze the present costs of education at the University of Michigan, to place those costs appropriately within the state and national contexts, and to help us develop new and imaginative ways to curtail cost increases while maintaining or increasing the quality of our programs of instruction, research, and service."

First Steps:

This committee of ten, which included faculty, administrative staff, and student members, began by examining institutional data that reported the University of Michigan's costs by budget category. The analysis helped to clarify and put to rest some popular lore about the causes of cost escalation. Many had come to believe that increased costs were simply due to the administration adding to its ranks in numbers beyond control. The data indicated that most of the growth in personnel was in fact attributable to sponsored research and auxiliary enterprises, and that growth in itself was not necessarily a sign of inefficiency.

From interviews with the heads of units and divisions in several areas of the University, the group came to realize that the growth in costs could not be blamed solely on "a bloated administration," "an inefficient plant operation," or "the rising costs of sustaining academic excellence." A full accounting of costs would have to address both administrative and academic issues. The Task Force saw that a successful program of cost reduction would require a new institutional culture in which every unit and department set about to achieve excellence through a more efficient use of resources.

The Task Force interviews of administrative support centers indicated opportunities for improved cost efficiency through a greater focus on customer satisfaction, a review of the means by which services are remunerated within the University, and a review of the process by which employees are advanced to positions of greater responsibility. In its interviews with academic units, the Task Force identified possibilities for containing expenditures by addressing questions of faculty workload. Substantial cost efficiencies might be realized, for instance, by consolidating some highly specialized courses into more general courses that could attract higher student enrollments. And there seemed to be advantages, from a cost standpoint, of introducing greater flexibility into the standard two-course-per-semester teaching assignment. Taking this step would recognize that research activity for most faculty members proceeds cyclically from high to low points of discovery and productivity. A more flexible standard would enable faculty members at a peak of research productivity to teach less, and those whose research was in a less active phase to teach more than the usual two-course assignment.

The interviews and analyses, along with readings and presentations from authorities in organizational management, gradually produced the insight that none of the group would have anticipated advocating as a means of cost containment: that, contrary to all common assumptions, quality enhancement at a research university could go hand in hand with cost reduction,

and that quality entailed defining the scope of services offered to meet the needs of the University's customers.

Prospects:

The themes of this report have set the tone for the University's planning in the 1990s. In December 1990, Provost Gilbert Whitaker appointed a ten-member Provost's Advisory Committee on Excellence (PACE), with representation from faculty, staff, and the student body, to assist in establishing expenditure priorities in light of the University's revenue constraints. Budget shortfalls in the State of Michigan this year will result in a $2.47 million cut in appropriations to the Ann Arbor campus. To maintain the quality of the University's teaching, research, and service in the face of such "negative supplemental appropriations" from the state government will require extraordinary resourcefulness.

The challenge of maintaining quality while achieving cost reduction, though daunting, is not insurmountable. As Provost Whitaker observed in an address to the Faculty Assembly in December 1990, "Intelligence and creativity are our primary resources. . . . All recognize that difficult choices will have to be made among very worthwhile objectives in order to assure that we focus our attention on our fundamental mission. All recognize that considerable advice and consultation must go into making those difficult choices. Furthermore, all recognize that the creditability of the process chosen is critical so that trust and mutual support will be be given to everyone involved in the effort required."